

Title (en)
Semiconductor power amplifier

Title (de)
Halbleiterstromverstärker

Title (fr)
Amplificateur de puissance semi-conducteur

Publication
EP 2535935 A3 20140101 (EN)

Application
EP 12150287 A 20120105

Priority
JP 2011135157 A 20110617

Abstract (en)
[origin: EP2535935A2] A semiconductor power amplifier of an embodiment includes: a plurality of unit FETs disposed in parallel in a direction of a substantially straight line connecting source electrodes of the unit FETs; a first via hole which connects the two source electrodes positioned between adjacent ones of the unit FETs in common and an RF ground electrode; and a second via hole which connects the source electrode on a side having no adjacent unit FET and the RF ground electrode. Each unit FET includes: a gate electrode which connects gate finger electrodes and leads out the gate finger electrodes; a drain electrode which connects drain finger electrodes disposed facing the gate finger electrodes and leads out the drain finger electrodes; and two source electrodes which connects source finger electrodes disposed facing the gate finger electrodes and lead out the source finger electrodes to opposing sides in a widthwise direction thereof.

IPC 8 full level
H01L 23/482 (2006.01); **H01L 23/522** (2006.01); **H01L 23/64** (2006.01); **H01L 29/417** (2006.01)

CPC (source: EP US)
H01L 23/4824 (2013.01 - EP US); **H01L 23/5227** (2013.01 - EP US); **H01L 23/645** (2013.01 - EP US); **H01L 29/4175** (2013.01 - EP US); **H01L 29/41758** (2013.01 - EP US); **H01L 23/481** (2013.01 - EP US); **H01L 28/10** (2013.01 - EP US); **H01L 2924/0002** (2013.01 - EP US)

Citation (search report)
• [X] EP 1739736 A1 20070103 - IMEC INTER UNI MICRO ELECTR [BE]
• [X] JP 2000332030 A 20001130 - NEC CORP
• [A] EP 2197030 A2 20100616 - TOSHIBA KK [JP]
• [A] GOLDFARB M E ET AL: "Modeling via hole grounds in microstrip", IEEE MICROWAVE AND GUIDED WAVE LETTERS, IEEE INC, NEW YORK, US, vol. 1, no. 6, June 1991 (1991-06-01), pages 135 - 137, XP011419942, ISSN: 1051-8207, DOI: 10.1109/75.91090

Cited by
US2023163121A1; US11842996B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2535935 A2 20121219; **EP 2535935 A3 20140101**; JP 2013004786 A 20130107; JP 5361951 B2 20131204; US 2012319778 A1 20121220; US 8710928 B2 20140429

DOCDB simple family (application)
EP 12150287 A 20120105; JP 2011135157 A 20110617; US 201213346037 A 20120109